14

Claims

SubA6

1.   A method of transmitting a video image including an object of interest comprising capturing a sequence of images in which the object of interest occupies a fraction of each image, tracking the object of interest by selecting and extracting a region of each image including the object of interest, and coding only the selected region of each captured image.

2.   A method as claimed in claim 1 comprising stabilising the object of interest within the extracted region.

3.   A method as claimed in claim 2 wherein the extracted region is selected so that the object of interest is centred within the extracted region.

4.   A method as claimed in any one of claims 1 to 3 comprising transmitting the coded region, and decoding and displaying the selected region.

5.   A method as claimed in claim 4 wherein the extracted region is displayed in a format comprising fewer pixels than the format of the captured image.

6.   A method as claimed in any one of claims 1 to 5 in which the object of interest occupies less than a predetermined fraction of each image.

7.   A method as claimed in any one of claims 1 to 5 in which the object of
5   interest occupies a small fraction of each image.

8.   A method of processing a video image including an object of interest comprising selecting a region of an image including the object of interest, the selected region being of a predetermined size, and coding the selected region.

10

9.   A method as claimed in claim 8 wherein only the selected region is coded and the rest of the captured image is discarded.

10.   A method as claimed in claim 8 or claim 9 wherein the selected region
15   corresponds to a predetermined image format having fewer pixels than the format of the image capture of the camera.

Sub A7

11.   A method as claimed in claim 10 wherein the captured image is in CIF format and the selected region is in QCIF format.

20

12.   A method as claimed in any one of claims 8 to 11 wherein the selected region is scaled to compensate for movements of the object of interest backwards and forwards relative to the camera.

5   13.   A method as claimed in any of claims 8 to 12 wherein the object of interest is stabilised within the selected region.

14.   A method as claimed in claim 13 wherein the selected region is such so that the object of interest is centred in the selected region.

10

15.   A method of processing a video image including an object of interest comprising selecting a region of the image including the object of interest and which is greater than the area occupied by the object of interest by a predetermined degree, and coding said region.

15

16.   A method as claimed in claim 15 wherein the object of interest occupies a predetermined percentage of the selected region.

17.   A method as claimed in claim 15 or claim 16 comprising scaling the
20   selected region to a predetermined size.

18.   A method as claimed in claim 17 wherein the predetermined size corresponds to a known format.

19.   A method as claimed in claim 18 wherein the captured image is in CIF format and the extracted region is scaled to QCIF format.

5

20.   A method of transmitting video images comprising processing video images according to a method as claimed in any one of claims 1 to 19, transmitting the encoded image data, and receiving, decoding and displaying the image data.

10

21.   A method of operating a video camera comprising arranging the camera so that an object of interest occupies a fraction of the area of the captured image, tracking movement of the object of interest within the captured image, selecting and extracting a region of interest around the object of interest and displaying only the extracted part of the captured image.

15

22.   An image processing circuit comprising means for extracting a region of each image including an object of interest and coding only the selected region of each captured image.

20

23.   An image processing circuit comprising means for selecting a region of an image including an object of interest, the selected region being of a predetermined size, and coding the selected region.

5   24.   An image processing circuit comprising means for selecting a region of the image such that the object of interest occupies a predetermined percentage of the region, and for coding said region.

25.   A video image processing circuit comprising means for performing a
10   method as claimed in any one of claims 1 to 21.

26.   A video image processing device comprising a camera and a circuit as claimed in any one of claims 21 to 25.

15   27.   A mobile phone comprising a circuit as claimed in any one of claims 21 to 25 or a device as claimed in claim 26.

28.   Apparatus for processing video images substantially as hereinbefore described as an embodiment with reference to the respective accompanying
20   drawings.

29.   A method of processing video images substantially as hereinbefore described as an embodiment with reference to the respective accompanying drawings.